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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,547	11/09/2001	Karl Maurer	0109	6750

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COMBIMATRIX CORPORATION
6500 HARBOUR HEIGHTS PARKWAY
MUKILTEO, WA 98275

EXAMINER

PIERRE, KENELT

ART UNIT PAPER NUMBER

2822

DATE MAILED: 05/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/008,547

Applicant(s)

MAURER, KARL

Examiner

KEN PIERRE

Art Unit

2822

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on November 9, 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 to 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. This office action is in response to the application filed on November 9, 2001

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 to 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ree et al (4,153,661) in view of Wessling et al (5,498,761).

Regarding claims 1 to 15, Ree et al disclose (Col. 1; lines 5 to 15) how to prepare a composite sheet by mixing in an aqueous media particulate material and polytetrafluoroethylene (hereinafter referred to as PTFE) particles, which are subsequently fibrillated therein to form a unitary matrix of entangled PTFE fibrils containing the particulate material. (Col. 4; lines 35 to 50) The thickening agent is PTFE resin in particle form or in aqueous suspension. The size of the particles is about 0.05 to 0.5 microns. (Col. 5; lines 25 to 40) Particulate materials, kaolin glass added to the mixture of the PTFE are of a smaller average particle size, from about 2 to 20 microns. (Col. 6; lines 30 to 40) Abrasive particles glass added to the mixture have a particle size in the range of about 5 to about 60 microns. (Col. 6; lines 65 to 70) (Col. 7; lines 1 to 5) The mixture of the thickening agent is selected from a group of solid polymers consisting of PTFE and can be formulated in many ways: to be insoluble in organic

solvents and to withstand hot corrosive liquids acid such as concentrated sulfuric acid and hydrochloride acid.

However, Ree et al do not disclose that the uses the coating made of PTFE to coat a semiconductor device, and the thickness of the coating film when it coats a semiconductor device with electrodes.

Wessling et al disclose (ABSTRACT) the process of forming polymer to coat semiconductor devices. (Col. 3, lines 40 to 60) A transistor with coated semiconductor is immersing in an aqueous solution. The coated semiconductor is dried in a vacuum. (Col. 3, lines 40 to 60) The semiconductor device is made of (silicon, gallium arsenide) (Col. 9, lines 30 to 50) The surface to be coated has platinum electrode. The coating layer thickness is about 500 nm = 0.5 microns. (Col. 11, lines 20 to 25) Depending on the contact time with the dispersion the thickness of the film is between 50 and 80 to 400 and 500nm thick, which is equal to 0.05 and 0.08 to 0.4 to 0.5 micron. (Col. 11, lines 60 to 68) The layer thickness can be varied by coating several time or by dissolution of the dispersion.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the mixture of the thickening agent made of PTFE to coat a semiconductor device with electrode, because coating a semiconductor device with a thickening agent modifies the surface static and conductive properties and protects against corrosion as taught per Wessling reference (Col. 9, lines to 25).

Conclusion

3. **THIS ACTION IS MADE NON-FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this non-final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this non-final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this non-final action.


4. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Ken Pierre whose telephone number is (703) 305-4002. The examiner can normally be reach on Monday-Friday from 8:30AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Carl Whitehead, Jr. can be reach at (703) 308-4940. The fax telephone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or processing should be directed to the receptionist whose telephone number is (703) 308-0956.

KP



May 15, 2002



CARL WHITEHEAD, JR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800